

### STATE OF IOWA

**EFFECTIVE BEGIN DATE: EXPIRATION DATE:**  04-25-2008

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04-24-2009 1 of 3

### MASTER AGREEMENT

### Contract Declaration and Execution

**VENDOR:** 

**Hydrite Chemical Company** PO Box 689227

Milwaukee, WI 53268-9227

VENDOR CONTACT: Karleen Rivenburgh

PHONE: 847-540-1179

EXT:

FOB FOB Dest, Freight Prepaid

EMAIL: waterloo.sales@hydrite.com

ISSUER:

JEANETTE CHUPP PHONE: 515-281-6288

EMAIL: Jeanette.Chupp@iowa.gov

Contract For: Chlorine Gas Cylinders for Water Treatment

The parties agree to comply with the terms and conditions on the following attachments which are by this reference made a part of the Agreement.

Attachment 1: General Terms and Conditions for service/goods contracts posted at: http://das.gse.iowa.gov/terms\_goods.pdf and http://das.gse.iowa.gov/terms\_services.pdf

Attachment 2: Contractor's Response to Competitive Bid RFB0707005051 of April 17, 2007.

Attachment 3: Contractor's Cost Response to RFB0707005051 of April 17, 2007.

Facilities: Woodward Resoruce Center and Dept. of Public Defense (Camp Dodge - Johnston)

Pricing: \$97.47 per 150 lb. Chlorine Gas Cylinder (delivered).

This contract is "exempt" from any fuel surchages.

FOB: Destination

Minimum Order: \$250.00

Refundable Cylinder Deposit: \$100.00

Payment Terms: Net 30

Customer Service Phone 800-373-2925 / FAX 319-232-1112 / E-Mail: waterloo.sales@hydrite.com

Inside Sales Representative: Karleen Rivenburgh

- E-Mail: Karleen.Rivenburgh@hydrite.com

- Direct Phone: 847-540-1179 or FAX: 847-540-8252

RENEWAL OPTIONS

FROM 04-25-2009 TO 04-24-2010 FROM 04-25-2010 TO 04-24-2011

**AUTHORIZED DEPARTMENT** 

IN WITNESS WHEREOF,	this Agreement has been exe	cuted by the parties hereto.

CONTRACTOR	STATE OF IOWA	
CONTRACTOR'S NAME (If other than an individual, state whether a	AGENCY NAME	
corp., partnership, etc.	Dept administrative Services	
Hydrite Chemical Company	4	
BY (Authorized, Signature) Date Signed (**)	BY (Authorized Signature) Date Signed	
Karleen Rivenburgh 3.2608	Jeanette Chipp March 26, 2008	
Printed Name and Title of Person Signing	Plinted Name and Title of Person Signing	
Karleen Rivenburgh	Jeanette Chupp	
Addraga	Address	
800 N Oakwood Dr. Lk gurich, IL	Hoover Bldg., Des Maines, Loura	
60047	•	



# **STATE OF IOWA**

EFFECTIVE BEGIN DATE:

04-25-2008 04-24-2009

EXPIRATION DATE: 04-24-200 PAGE: 2 of 3

# **MASTER AGREEMENT**

Contract Declaration and Execution

LINE NO.	QUANTITY / SERVICE DATES	UNIT		UNIT COST / PRICE OF SERVICE
1	0.00000	CYL	88538	\$97.470000
				\$0.000000
			Chlorine, Liquefied	
			Chlorine Gas (for water treatment)	
			150 lb. Cylinder	
			(Minimum Order \$250.0)	
			•	
2	0.00000	CYL	88538309001	\$100.000000
				\$0.00000
			CYLINDER DEPOSIT	
			Note: This is a "REFUNDABLE" cylinder deposit. Cylind	ers will be
			picked-up at the time of your next scheduled delivery.	
			•	
3	0.00000		88538	\$0.000000
				\$0.000000
			Chlorine, Liquefied	



# STATE OF IOWA

# EFFECTIVE BEGIN DATE: EXPIRATION DATE:

### 04-25-2008 04-24-2009

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# MASTER AGREEMENT Contract Declaration and Execution

# TERMS AND CONDITIONS

### **Terms & Conditions Goods**

The parties agree to comply with the terms and conditions on the following web site which are by this reference made a part of the Agreement.

General Terms and Conditions for goods contracts are posted at: http://das.gse.iowa.gov/terms\_goods.pdf Terms & Conditions Service

The parties agree to comply with the terms and conditions on the following web site which are by this reference made a part of the Agreement.

General Terms and Conditions for service contracts are posted at: http://das.gse.iowa.gov/terms\_services.pdf

### REQUEST FOR BID FORM

**BID Number 0707005051** 

Bids are due on or before 3:00 P.M., April 17, 2007



Bid Packets must be submitted in hard-copy via mail or courier as directed in Section #28.

Bid Form .. Page 1 of 2 **Purchasing Agent: Jeanette Chupp** 

- 1.) Review the attached entire bid specification package
- 2.) Complete and return the 2-Page "Request for Bid" Form, and the MSDS Sheet for the product offered via U.S. Mail or Courier per Section #28.

Complete Pricing below for annual "delivered" contract pricing per the attached specification package.....

One (1) Each, Chlorine Gas, 150 lb. Cylinder, Delivered...\$96.53 per 150 lb. Cylinder One (1) Each, Refundable Cylinder Deposit ......\$100.00 per 150 lb.Cylinder (CL-0000-02) Chlorine Gas: Formula: Cl2 (Cl-Cl), C.A.S. Registry No. 7782-50-5 Cylinder: 150 lb. Size ... Minimum Order Quantity: 10 cylinders \* \$250.00 minimum order is Delivered: Delivered on an as-needed basis within 15-days to ... required. Woodward Resource Facility, Exempt from fuel surcharge. 1251 - 334th Street, Woodward, Iowa, 50276 One (1) Each, Chlorine Gas, 150 lb. Cylinder, Delivered...\$NO BID per 150 lb. Cylinder One (1) Each, Refundable Cylinder Deposit ......\$ per 150 lb.Cylinder Chlorine Gas: Formula: Cl2 (Cl-Cl), C.A.S. Registry No. 7782-50-5 Cylinder: 150 lb. Size, ... Minimum Order Qty: 16 cylinders Meeting all Federal, State, Local requirements for sale and transport of Chlorine Gas. Delivered: Delivered on an as-needed basis within 15-days to the ... **Iowa State Penitentiary** 31 Avenue "G", P.O. Box 316, Fort Madison, Iowa, 53627 One (1) Each, Chlorine Gas, 150 lb. Cylinder, Delivered...\$\,96.53\) per 150 lb. Cylinder One (1) Each, Refundable Cylinder Deposit ......\$ 100.00 per 150 lb.Cylinder (CL-0000-02) Chlorine Gas: Formula: Cl2 (Cl-Cl), C.A.S. Registry No. 7782-50-5 Cylinder: 150 lb. Size, ... Minimum Order Qty: 3 cylinders \* \$250.00 minimum order is Meeting all Federal, State, Local requirements required. for the sale and transport of Chlorine Gas. Exempt from fuel surcharge.

Delivered: Delivered on an as-needed basis within 15-days to the ... Public Defense, Camp Dodge - Building S-8,

7105 NW 70th Avenue, Johnston, Iowa

(Continued on the next page)

# REQUEST FOR BID FORM

BID Number 0707005051

Bids are due on or before	
3:00 P.M., April 17, 2007	

Bid Packets must be submitted in hard-copy



via mail or courier as directed in Section #28.	Bid Form	Page 2 of 2	
NOTE: All Pricing is required on a DELIVERED B All product pricing shall include freight/hand pricing offered above and shall NOT be sub No freight charges shall be invoiced or paid	dling chargo eject to any	fuel surchar	ges.
Vendor Ordering Address: <u>Hydrite Chemical Co.,</u> Drive, Waterloo, IA 50703	2815 W.C	.F. & N.	
Vendor Payment Address: Hydrite Chemical Co., Milwaukee, WI 53268-9227	Box #689	227,	
Orders may be placed or customer service received at:  Phone: 800-373-2925 or 319-232-97,3 FAX: 319-23  E-Mail: waterloo.sales@hydrite.com , Web-Site:	32-1112		
Complete Vendor Information below: Authorizing Signature: Mary Kay Christer  Print Authorizing Signature Name: Mary Kay Christer			
Company Name Typewritten: Hydrite Chemical Co.			
Mailing Address: 2815 W.C.F. & N. Drive, Water	Loo, IA	50703	
Phone: 800-373-2925 or 319-232-9731 FAX: 319-	232-1112		
E-Mail Address: waterloo.sales@hydrite.com			
Payment Terms for State of Iowa Purchase Order:		Net30_	days.
Federal Employment Identification Number: 39-0363390	)		
Delivery will be made within $\underline{7-10}$ calendar days after reco	eipt of State	Purchase O	der.
A prompt payment discount of <u>0</u> % shall be applied to a receipt of the Vendor's invoice at via the State of Iowa Mas	ny order pa stercard Pro	id within 5-da curement Ca	ays of rd.

\* Please return bid results in the self-addressed, stamped envelope.

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CHLORINE

10/10/03 As of

MSDS ID: CL0000

# 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

: CHLORINE

: CL0000

MSDS ID

CHEMICAL NAME SYNONYMS : Liquid Chlorine

CAS NUMBER

: 7782-50-5 : Halogen

FORMULA

: Cl2

DISTRIBUTED BY:

CHEMICAL FAMILY

EMERGENCY RESPONSE NUMBERS:

Hydrite Chemical Co. 300 N. Patrick Blvd.

24 Hour Emergency # - (414) 277-1311 CHEMTREC Emergency # - (800) 424-9300

Brookfield, WI 53008-0948

(262) 792-1450

MANUFACTURED BY: Vulcan Chemicals; Occidental Chemical, Corp.; Olin -

Chlor Alkali Products

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT Chlorine

CAS NUMBER

OSHA HAZARD % BY WT.

7782**-**50-5

YES > 98 %

### 3. HAZARDS IDENTIFICATION

PHYSICAL STATE: Liquid. Gas.

COLOR ODOR

: Amber. Greenish-yellow. : Pungent irritating odor.

\*\*\*EMERGENCY OVERVIEW\*\*\*: DANGER! CORROSIVE. TOXIC. Causes severe burns to eyes, skin, and respiratory tract. Liquified, nonflammable gas under pressure. Harmful or fatal if swallowed. May be harmful or fatal if absorbed through the skin. May be harmful or fatal if inhaled. OXIDIZER! May ignite organic materials and react with other materials.

### POTENTIAL HEALTH EFFECTS

ROUTES OF EXPOSURE:

Absorption. Eyes. Ingestion. Inhalation. Skin.

TARGET ORGANS:

Eyes. Respiratory System. Skin.

EYE CONTACT:

May be corrosive to the eyes. Severe irritation and burns may result. High vapor concentration or liquid contact may cause: redness. tearing. pain. permanent eye damage. blurred vision. blindness. Corneal injury may occur.

SKIN CONTACT:

May be corrosive to the skin. Severe irritation and burns may result. Liquid or gas are capable of: redness. swelling. blistering. irritation.

<u> </u>	MATERIAL SAFETY DATA SHEET	Page Revised	2 of 9 3/06/02
CHLORINE		Replaces	
MSDS ID:	CL0000	AS OI	10/10/03

# 3. HAZARDS IDENTIFICATION (Cont.)

#### SKIN ABSORPTION:

May be harmful if absorbed through skin.

#### INHALATION:

May be corrosive to the respiratory tract. Severe irritation and burns may

Poison. May be fatal if inhaled. May irritate or burn: nasal passages. eyes. mouth. May cause: nausea. dizziness. shortness of breath. wheezing. choking. chest pain. coughing. headache. suffocation. Inhalation of high concentrations may cause: pulmonary edema. unconsciousness. chemical pneumonitis. impaired lung function. damage. death. Symptoms of exposure may be delayed by several hours.

#### INGESTION:

May be corrosive to the gastrointestinal tract. Severe irritation and burns may result.

May cause burns to the: mouth. esophagus. stomach. May cause: nausea. vomiting. diarrhea. abdominal pain. bleeding. tissue destruction.

# MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE TO PRODUCT:

Respiratory system disorders. Asthma. Cardiovascular disorders. Bronchitis. Emphysema.

Smokers may be more sensitive to respiratory effects of chlorine. Repeated exposure to Chlorine may result in reduced pulmonary capacity and dental erosions. Concentrations of 3-6 ppm can cause irritation of the nose and mucous membrane of the upper respiratory tract followed by headache and coughing; 10 ppm can cause severe irritation of the respiratory tract; 15-20 ppm cause intense cough. Exposures to concentrations above 25 ppm can cause unconsciousness and death. Exposures to humans to 0.5 ppm for 8 hours and 1 ppm for 4 hours have caused transient decreased pulmonary capacity, as measured by pulmonary function tests. In persons exposed to acute, non-lethal levels, decreased pulmonary capacity is followed by gradual return to normal. In some cases long lasting effects have been observed. Repeated exposures can result in a loss of the ability to detect the odor of chlorine. Long-term exposures may cause damage to teeth and inflammation or ulceration of the nasal passages.

### CANCER INFORMATION:

This product does not contain greater than 0.1% of the known or potential carcinogens listed in NTP, IARC, or OSHA.

# POTENTIAL ENVIRONMENTAL EFFECTS:

See Section 12.

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CHLORINE

MSDS ID: CL0000

# 4. FIRST AID MEASURES

### EYE CONTACT:

Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention.

Washing eyes within several seconds is essential to achieve maximum effectiveness.

### SKIN CONTACT:

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not reuse clothing and shoes until cleaned. Treat for inhalation first.

### INHALATION:

Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

### INGESTION:

If fully conscious, drink a quart of water. DO NOT induce vomiting. CALL A PHYSICIAN IMMEDIATELY. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious victim. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. If available, give several glasses of milk.

NOTE TO PHYSICIANS: There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Maintain under observation for 48 hours due to the risk of pulmonary edema. Steroid therapy, if given early, has been reported effective in preventing pulmonary edema.

### 5. FIRE FIGHTING MEASURES

FLASH POINT: N.A.

FLAMMABILITY LIMITS: LEL: N.A. AUTOIGNITION TEMPERATURE: No Data UEL: N.A.

### EXTINGUISHING MEDIA:

Use agent suitable for surrounding fire.

# FIRE FIGHTING METHODS:

Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-Approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products.

Use water spray to cool fire-exposed containers, but avoid getting water into containers. Stop flow of gas before extinguishing fire. Move containers from fire area if possible. Do not apply water to leaking containers. Use water spray to keep fire-exposed containers cool and to protect persons effecting shut-off. Fire fighters should wear a one piece,

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CHLORINE

# 5. FIRE FIGHTING MEASURES (Cont.)

total-encapsulating suit of Butyl coated nylon or equivalent. Run-off from fire control may cause pollution.

# FIRE AND EXPLOSION HAZARDS:

Product may react with some metals (ex.: Aluminum, Zinc, Tin, etc.) to release flammable hydrogen gas.

Capable of supporting combustion of certain substances. Reacts explosively, or forms explosive compounds, with many chemicals such as acetylene, turpentine, ether, ammonia gas, hydrogen, and finely divided metals.

# HAZARDOUS COMBUSTION PRODUCTS:

Toxic vapors.

# 6. ACCIDENTAL RELEASE MEASURES

# SPILL CLEAN-UP PROCEDURES:

STRONG OXIDIZER. Eliminate all sources of ignition. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit.

Keep upwind of leak or spill. Shut off source of leak if safe to do so. Clean-up personnel must be equipped with self-contained breathing apparatus and butyl rubber protective clothing. Prevent entry into basements, low areas, or confined areas. If a container is leaking, try to position it so that the gas rather than the liquid leaks. Apply emergency kit device if possible. For other than minor leaks, immediately implement predetermined emergency plan. Report spills to appropriate government authorities. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

### 7. HANDLING AND STORAGE

#### STORAGE:

STRONG OXIDIZER. Store in a cool, well ventilated area away from all sources of ignition and out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers.

Store below 140 Deg. F. Do not attempt to handle, store or use Chlorine without complete review of the Chlorine Institute's Chlorine Manual (Call: 202-775-2790). Chlorine piping and equipment must be thoroughly cleaned of organics and moisture before use. Liquid Chlorine lines must have suitable expansion chambers between block valves due to the high coefficient of expansion. Always handle Chlorine with full regard to its pressure characteristics. KEEP AWAY FROM HEAT AND MOISTURE. NEVER place a leaking container in water nor spray a leaking container with water. Correct leaks immediately. Protect container from weather and physical damage. Liquid levels should be less than 85% of tank or cylinder capacity.

### HANDLING:

Avoid contact with eyes, skin, and clothing. Use with adequate ventilation.

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CHLORINE

MSDS ID: CL0000

### 7. HANDLING AND STORAGE (Cont.)

Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. Empty containers retain product residue (vapor, dust, or liquid) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCE OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. CORROSIVE MATERIAL. Personnel near or handling Chlorine, should AT ALL TIMES carry a NIOSH/MSHA-approved chemical cartridge type escape respirator and be trained in its use. Follow safety procedures for containers of compressed gases.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### ENGINEERING CONTROLS:

General room ventilation and local exhaust are required. Process enclosures or other engineering controls may be needed to maintain airborne levels below recommended exposure limits. Maintain adequate ventilation. Do not use in closed or confined spaces. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly. NOTE: Chlorine is heavier than air and tends to collect at ground or floor level. Provide ventilation for low-lying areas.

### RESPIRATORY PROTECTION:

Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH approved full facepiece chlorine type respirator. NIOSH-Approved full-facepiece possitive-pressure, air-supplied respirator. NIOSH-Approved self-contained breathing apparatus with full facepiece is required for vapor concentrations above 10 ppm and for leaks and/or emergencies. Wear respirator while operating valves and connecting and disconnecting lines. Personnel handling or near Chlorine should at all times carry a NIOSH/MSHA-approved, chemical cartridge type, escape respiratory and be trained in its use. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

### EYE/FACE PROTECTION:

Wear chemical safety goggles and a full face shield while handling this

Do not wear contact lenses.

### SKIN PROTECTION:

Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Rubber. Neoprene. Vinyl.

### OTHER PROTECTIVE EQUIPMENT:

Eye-wash station. Safety shower. Rubber boots. Protective clothing.

CHLORINE

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# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION (Cont.)

Fully encapsulated suit for areas of high concentrations.

# GENERAL HYGIENE CONSIDERATIONS:

Wash with soap and water before meal times and at the end of each work shift. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical, especially before eating or smoking.

EXPOSURE GUIDELINES:

COMPONENT Chlorine

-----ACGIH------PEL STEL/C TWA STEL/C
Not Estab. 1 ppm-C 0.5 ppm 1 ppm

0.5 ppm+ 1 ppm+

NOTE: \* IDLH = 10 ppm. Odor threshold approximately 0.3 ppm - highly variable especially with individuals routinely exposed.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (DEG. F) : -29 FREEZING POINT (DEG. F): -150 MELTING POINT (DEG. F) : N.D.

VAPOR PRESSURE (MM HG) : 2748 @0C

VAPOR DENSITY (AIR=1) : 2.5 : Slight SOLUBILITY IN WATER

: N.A.

SPECIFIC GRAVITY: 1.467 @0C

% VOLATILE (WT%): 100% EVAPORATION RATE: N.D.

(nBuAc=1)

VOC (WT%)

VOC (LBS/GAL) : 0

# 10. STABILITY AND REACTIVITY

### STABILITY:

Stable under normal conditions.

# CONDITIONS TO AVOID:

Avoid contact with heat, sparks, electric arcs, other hot surfaces, and open flames. Avoid temperatures above 125 Deg. F.

### TNCOMPATIBILITY:

Alkalies. Reducing agents. Organic materials. Ammonia. Metal hydrides. Carbides. Phosphides. Sulfides. Readily-oxidized materials. Acetylene. Turpentine. Combustible materials. Metallic powders. Sulfur. Aluminum. Elemental metals. Nitrides. Unstable and reactive compounds. Oxides. Dry chlorine is highly reactive with titanium and tin. Reacts with most metals at high temperatures. Reacts with water to produce hydrochloric and hydrochlorous acids, which are corrosive to most metals. Combines with carbon monoxide and sulfur dioxide forming phosgene and sulfuryl chloride. Moist chlorine is highly corrosive to most metals. Chlorine reaction to some organic compounds can be explosive.

HAZARDOUS DECOMPOSITION PRODUCTS: Chlorine gas is poisonous.

HAZARDOUS POLYMERIZATION:

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CHLORINE

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# 10. STABILITY AND REACTIVITY (Cont.)

Will not occur under normal conditions.

# 11. TOXICOLOGICAL INFORMATION

: No Data LD50 ORAL : No Data LD50 SKIN

LC50 INHALATION: Rat: 293 ppm/1H

# 12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:

Extensive data, call for information.

CHEMICAL FATE INFORMATION:

Extensive data, call for information.

# 13. DISPOSAL CONSIDERATIONS

HAZARDOUS WASTE NUMBER: N.A.

DISPOSAL METHOD:

Dispose of in a permitted hazardous waste management facility following all

local, state and federal regulations.

- Absorb in alkaline solution such as Caustic Soda, Soda Ash or Hydrated Lime. Care must be taken during neutralization process due to high heat generation. Place neutralized material in a closed container. For guidance in disposal of material, contact your regional office of the Environmental Protection Agency (EPA). Do not Discard to water or sewer. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition.

# 14. TRANSPORT INFORMATION (Not meant to be all inclusive)

DOT (Department of Transportation):

Proper Shipping Name : Chlorine : 2.3 (8) Hazard Class Identification Number : UN1017

: N.A. Packing Group

Additional Description : Poison-Inhalation Hazard, Hazard Zone B.

Marine Pollutant : Chlorine.

: POISON GAS; CORROSIVE Label Required

Reportable Quantity (RQ): 10# (Chlorine).

# 15. REGULATORY INFORMATION

### FEDERAL REGULATIONS:

TSCA INVENTORY STATUS:

This product or all components of this product are listed on the EPA/TSCA Inventory of Chemical Substances.

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CHLORINE

MSDS ID: CL0000

15. REGULATORY INFORMATION (Cont.)

SARA TITLE III SECTION 311/312 CATEGORY: IMMEDIATE (ACUTE) HEALTH HAZARD : YES DELAYED (CHRONIC) HEALTH HAZARD : NO : YES FIRE HAZARD SUDDEN RELEASE OF PRESSURE HAZARD: YES : NO REACTIVE HAZARD

SARA SECTION 302/304/313/HAP:

RQ (LBS) RQ (LBS) TPQ (LBS) SEC 313 HAP COMPONENT (\*1) (\*2) (\*3) (\*4) (\*5) 10 100 10 YES YES \*1 = CERCLA Reportable Quantity

\*4 = SARA 313 TOXIC CHEMICAL, 12 

\*5 = U.S. EPA Hazardous Air Pollutant

\_\_\_\_\_\_

ANSI/NSF Standard 60 Maximum Use Level = 30 mg/L.

### STATE REGULATIONS:

CALIFORNIA -- The following components are listed under Prop 65: This product may contain detectable levels of (a) chemical(s) subject to California's Proposition 65. If you require more information regarding this regulation, please contact your supplier.

WISCONSIN--The following components are listed as a Wisconsin HAP: Chlorine.

### 16. OTHER INFORMATION

HMIS RATING SYSTEM NFPA RATING SYSTEM Health : 3 Health : 4
Flammability: 0 Flammability : 0
Reactivity : 1 Reactivity : 0
\* = Chronic Health Hazard Special Hazard: OX

MSDS ABBREVIATIONS: N.A. = Not Applicable N.D. = Not Determined

HAP = Hazardous Air Pollutant VOC = Volatile Organic Compound

C = Ceiling Limit

N.E./Not Estab. = Not Established

MSDS PREPARED BY: JAK

REASON FOR REVISION: New format.

The data in this Material Safety Data Sheet relates only to the specific

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MSDS ID: CL0000

CHLORINE

# 16. OTHER INFORMATION (Cont.)